

Cold, Wet, and Alive Video Script

The film *Cold, Wet, and Alive* was created in 1989. Currently, the video is still the number one video used by boating law administrators across the country. The following script was transcribed and reconstructed from the actual video. It is a story about what may be termed a “hypothermic accident.” The video has two thematic tracks. The first track is the main focus of the video. It focuses on hypothermia and specifically how you get hypothermia on a typical outing. The second track is about the accident process. The individuals and the group made decisions regarding their trip that like a series of dominos resulted in David losing his boat (injury, damage, or loss). The two themes parallel each other and the two messages complement each other in a 20 minute video that is more complex than it first appears.

THERMOGRAPH: There are a series of thermographs which are graphic inserts that show what is going on internally inside David’s body as he begins to get hypothermia.

The video (DVD), *Cold, Wet, and Alive*, is available from the American Canoe Association in Fredericksburg, Virginia.

OPENING SCENE: *The group’s car is driving through rural setting and across the bridge at the lunch stop. The group is inside the vehicle.*

Radio Announcer: Come on all you late sleepers it’s Saturday. Weather service is calling for a high near 70. Sunday looks like its back to normal, you guessed it, cold and rainy. Normal high for this date is 49 degrees. You’re tuned to WTSR FM.

Dean: Woah, it looks like it’s really moving. [Note: Referring to the river]

David: Oh man, it looks great. Oh, I am so ready for this.

Lisa: Did you bring the dry clothes?

Michael: Right, and you have the lunch?

Lisa: Uh, yes. And the keys.

Michael: *relieved sigh*

PUT-IN SCENE: *Riverside, the group is unloading boats and preparing to get on the river.*

David: Well hey there. My names David and I’d like to tell you about a canoe trip I took with some friends. For so early in the Spring I don’t think you could have asked for a better day. Oh, that’s Dean.

Michael: How about this day?

David: There’s Michael, and Becky. Me, again. And, good ol’ Lisa. Some of us had a pretty rough time, but it sure didn’t start out that way.

Narrator: It’s easy for us to take our body for granted. Without so much as a conscious thought it can synchronize the workings of 10 trillion cells. [Note: David trips and catches himself]

THERMOGRAPH: *Thermograph of David's body showing core and extremity temperatures.*

TIME: 10:54 am

AIR TEMPERATURE: 64°F

DAVID'S BODY TEMPERATURE: Normal – 98.6°F

Narrator: Yet as warm blooded creatures what our cells do, our strength, our coordination, even our thinking is done best only when we stay warm. David begins the trip with a normal body temperature. There's a core region containing vital organs like the heart, lungs, and brain that's about 98.6 degrees. In fact, David's entire body is near 98.6 and so he is said to be in his optimal thermal state.

David: Huh, it must've been near 70 degrees by the time we got to the river. Even so Becky decided to wear a wetsuit. Dean too!

Dean: Boy, it's been a while...I sure hope this thing still fits.

David: Wow, are you going to be ripe in that thing, it's so warm today.

David (narrating): Well, I guess I have a tendency to dress for the moment.

Michael: Lisa, you're gonna sink the boat with all that stuff.

Lisa: You're gonna be glad I brought it later.

Michael: And a thermos too?

Lisa: Yeah, and a thermos too.

Becky: Dad, do we really need all this stuff?

Dean: Well, it's a long day.

David (narrating): *It seems like these guys were bringing a ton of stuff.*

Becky: I felt the water and it's cold.

David (narrating): *I just wanted to get on the river.*

Lisa: *Shrieks.* I didn't know I was going to get my feet wet!

Dean: Alright, here we go. One, two, ...*fades into background noise*

Becky: Here we go.

RIVER SCENES: *The group begins to navigate down the river. Different scenes show the group having fun and being playful on their river trip.*

Narrator: An optimal thermal state is that warm to your toes feeling and is difficult to maintain. Mostly, our surroundings are cooler than 98.6 and so we lose heat. David, with his wet cotton short sleeves is losing heat the fastest. He feels fine because he is also the most active. Lisa and Michael have managed to stay dry so their cotton warm-ups keep them comfortable. Dean and Becky have the least heat loss. Wet or dry their wetsuits are effective at keeping heat in. So, each paddler has made his own preparations for the day, each has his own vision of what the day holds, but will events unfold according to plan? And if they don't, what margin of safety can these boaters fall back on?

ROLL SCENE: *David rolls this kayak. Still early in the day, the group is very playful and enthusiastic.*

Dean: Hey David, what about that fancy new roll of yours?

Lisa: Yeah, show it to us!

David (narrating): Well, they didn't have to egg me on much. I practiced in a pool over the winter and I was wondering if I could do it on the river. But man, when my head hit that water...

Group is pulled over on shore while David successfully rolls his kayak.

THERMOGRAPH: *Thermograph of David rolling his kayak and heat loss of at least 25x faster in the water than in the air.*

TIME: 11:25 am

AIR TEMPERATURE: 64°F

WATER TEMPERATURE: 46°F

DAVID'S BODY TEMPERATURE: Normal

Narrator: David has just given his body a real thermal jolt. Water conducts heat from the skin much faster than air. In fact, the river is drawing away heat at least 25x faster than the air would. Luckily, David's immersion is only a momentary shock to his senses.

Michael: Let's go get him, come on!

RIVER SCENES: *The group re-enters the current and continues downstream.*

David (narrating): That quick dunking was invigorating to say the very least. Even though I warmed up right away I decided that would be my last demonstration.

Narrator: David is having a different day than his companions. He's been charging up and down the river, pushing the whole time. He's generating a lot of heat and promptly losing it with wet, exposed skin. He's struck a kind of thermal balance between the heat he produces and the heat he dissipates. The others have found a balance too. On the warm rocks their heat loss is minimal, so they don't need to work at all at staying warm.

The group is pulled over again, warming and sunning on a group of rocks while David paddles in the current.

Michael: David, you don't know when to stop do you?

THERMOGRAPH: *Scene shows a person converting into a machine that consumes and gives off energy.*

TITLED: Metabolism

Narrator: But where does all this heat come from? Where does David get his energy? The warmth that David achieves by hard paddling is a natural by-product of metabolism. That's a technical term for the chemical process by which our cells burn the food we eat. In a sense, food is fuel for a complex engine that runs at different speeds, but never stops. Our bodies must have fuel in order to produce work and heat.

SNACKING SCENE: *Transition into group resting and passing snacks while David continues to paddle.*

Becky: Thanks!

Lisa: Any raisins left?

Narrator: Food can be stored in our bodies almost like gas in a tank. By eating high energy foods throughout the day, we keep the tank topped off. In this group however, the one driving the fastest has the lowest tank.

DAVID COMES OUT OF HIS BOAT: *David is paddling, begins to visibly lose balance in a turbulent section of water. He capsizes, is unable to roll upright, swims from the boat, and performs a successful self-rescue.*

David (narrator): I passed up on the munchies and it even seems to me that I was so anxious to get on the river that morning I'd skipped breakfast. But hey, empty stomach or not I was having a blast. No words can express the shock I felt coming out of my boat and feeling icy water head to toe. I remember gasping for breath the cold was so intense.

THERMOGRAPH: *David swimming in cold water*

TIME: 305 pm

BODY TEMPERATURE: Core temperature is still normal; extremities and skin are cooling

Narrator: A warm body exposed to cold water is thrown out of thermal balance. Metabolism quickens but the heat loss is so great the balance persists. Sensing a crisis the body reacts. Changes in blood circulation occur within seconds. Vessels near the skin and in the limbs restrict, reducing the flow of warm blood to these cooling regions. But no longer is David's body 98.6 throughout. Now, ideal temperature is maintained only in the core region. This is the body's game plan for dealing with cold stress. Conserve precious heat for the core, let the limbs get cold.

David (narrator): Well, needless to say the little dip in the creek had its effect for sure. I was beginning to lose my sense of humor and that spray skirt, it was almost too much for my aching fingers.

RIVER SCENES: *The group continues their trip down the river.*

Lisa: Straighten out Michael, straighten out!

Narrator: In sports that demand agility these adjustments the body makes to cold can spell trouble. David needs a warm core for his body to function properly but he also needs warm, coordinated muscles to get down the river safely. To satisfy this double demand David boosts his heat production draining his energy reserves even faster. Of course, everyone is depleting their store of energy, but at vastly different rates. As the day wears on, clothes get wet. Maybe the sun goes in. Energy is expended. Fuel reserves dwindle. Unnoticed, the margin for error shrinks.

LUNCH STOP SCENE: *Group pulls over at the base of a bridge. They pass around snacks and beverages from the thermos. David continues to paddle in the current. They have a decision to make whether to continue their trip or take out here and hitchhike to the car. They choose to continue their trip.*

Becky: Hey dad, there's the bridge we crossed this morning.

Dean: Yeah, let's pull over here on the right and get the water out of the boat.

David (narrator): It was past four when we got to the halfway point.

Michael: I'm hungry.

Dean: And I think this is the last we're gonna see of the road. Canyon starts just up around the bend.

David (narrator): Now, paddling hard was the only way I could feel warm. I didn't want to stop.

Lisa: Hey David! You want something to eat? We have plenty.

David: No thanks. I'm not hungry.

David (narrator): Actually, I was starved. But what I wanted more was to finish that run and get to someplace warm.

Lisa: Is anybody else getting cold?

Dean: You know, we still have a ways to go. We could call it a day, we could probably hitch back to the car from here.

Michael: Look, I know it's late but if we keep up the pace, we'll keep warm.

Lisa: Let's see how David feels.

Dean: Hey David you good to keep going?

David: Yeah, yeah we came to paddle. Let's keep going.

CONTINUES TRIP SCENES: *David begins having difficulty staying upright. He, Michael, and Lisa all have difficulties. Scenes depicting these difficulties. The group is focused inwardly. It is no longer playful in their behavior.*

David (narrator): That decision was kind of a turning point. It was late, it was getting colder, and we did have a chance to bail out at the bridge. We didn't take it, and that's when our real problems started. The fatigue was beginning to work on my mind. I would go over, and I wouldn't even try to roll.

Lisa: Turn the boat, turn the boat.

David (narrator): Then Michael and Lisa began to have problems. It seemed like one or the other of us

was always in the water.

Michael: Are you alright?

Lisa: Yeah, I'm alright.

Michael: Pull the boat up.

Narrator: Any insulating value Michael and Lisa's clothing had is now gone. Even if they manage to stay upright they'll feel the chill of rapid heat loss.

Michael: Your hands are so cold.

Lisa: I'm freezing, what do you expect?

THERMOGRAPH: *Hypothermia. (Note: This is the first mention of hypothermia in the film.)*

TIME: 5:15 pm

AIR TEMPERATURE: 54°F

WATER TEMPERATURE: 46°F

DAVID'S BODY TEMPERATURE: 95-96°F

Narrator: But David's problem is more than comfort, he's exhausted. With the fuel gauge nearing empty he can no longer warm himself by exercising. The body's first line of defense, activity and higher metabolism can't hold out indefinitely. David begins to shiver. By late afternoon, he passes a critical point. The heat that David can generate and retain is no longer sufficient even to keep the core at 98.6. Slowly, insidiously, the core temperature drops. At first, just a few degrees. Often accompanied by shivering this low temperature condition in the core is called hypothermia.

GORGE SCENE: *The sky darkens and raindrops begin to fall. Dean and Michael's canoes pull over to scout the drop. The water in the gorge is rising.*

David (narrator): In the gorge we noticed the water was rising. We came to a drop that dean thought maybe we should portage around.

Dean: So much for the weather forecast.

David (narrator): And just when I was thinking things couldn't get much worse, to show you how messed up I was, the river was actually starting to feel warm.

Dean: Where's David?

Michael: He's coming.

Dean: Let's take a look.

Michael: Hey Lisa, do you want to take a look?

Lisa: *Shakes head and replies:* "no".

David (narrator): Well, the water had gotten pretty atrocious. I was falling behind. We were all drawing inward, thinking about ourselves. We weren't a group anymore. Hm, I guess that explains a lot of what happened next. Chalk it up to my foggy brain, but I thought Dean was waving me on.

David approaches the rest of the group. Dean is waving David to shore to scout, but David continues to approach the drop. David capsizes and swims.

Dean: David! Pull over!

Becky: He's going on through!

Dean: Oh no! He's rolled over! Let's go!

Michael: What are you guys going to do?

Dean: We're going to go after him, he's in trouble.

Michael: I guess we'll go too!

The canoes follow David and all of the boaters capsize. Everyone makes it to shore except for David who is caught in an eddy behind a rock and trying to hold on.

THERMOGRAPH: *Death Scene – This graphic shows what happens if there is no intervention in the hypothermia process.*

TIME: 6:08 pm

DAVID'S BODY TEMPERATURE: 95°F and dropping

Narrator: It took a whole, long day of little mistakes to lay this trap. Now, pressed into a course of action for which no one is really prepared, the trap closes swiftly. Like falling dominoes ... one error leads to another. The group unravels. Without assistance, David's swim will be a long one, with the seconds literally ticking away his life. Their blood flow now sharply reduced, limbs become numb and weak, making swimming, or even holding onto a boat, nearly impossible. Yet, the body has one last defense, in a desperate attempt to preserve life it continues a systematic shutdown. As core temperature falls, shivering stops. The body just cannot afford the expenditure of energy. Pulse and respiration slow as the heart and lungs cool, blood becomes thick and septic. The heart strains to continue. As his brain cools, David's speech becomes slurred. His judgment, clouded. Eventually, he loses consciousness. In time, his heart may falter. More likely, he will drown first.

RESCUE SCENE: *The camera pans over a pinned canoe and scattered gear before focusing on Dean as he runs up the shore and locates David. Hypothermic, David clings to a rock in the middle of the river while Dean rescues him. The rest of the group is on the shore watching.*

David (narrator): That's how the day might have ended. We were like debris, scattered along the river, and it was largely my fault. Lisa's condition was following close behind mine, and my luck had almost run out. Almost, but not quite. Thanks to the wetsuits, Dean and Becky were still functioning.

Dean: David, are you ok? Are you ok? Get out of the water, you've got to get out of the water. Come on!

Dean swims to save David as Michael follows them downstream. Michael and Dean help David onto shore.

David (narrator): I tried to climb onto the rock but my arms were useless. Without a lifejacket, I would have drowned for sure. But yeah, Dean was turning out to be a real hero. I don't remember much about the swim, but Michael says he chased us forever.

Michael: Come on, we've got to get you out of the water.

Dean: Get him on the rock here.

David (narrator): What I do remember, is not being able to get out of the water on my own. I'm not sure if

I cared one way or another. Looking back, that's what scares me the most.

Becky runs to Dean, Michael, and David with dry clothing and other supplies. The group dresses David in dry clothes, place a pad under his seat to stop further heat transfer, David is given a hat and other survival gear. Becky runs to locate Lisa and ensure she is also doing well. The group starts a fire.

Narrator: David's shivering is actually a good sign. It means his core temperature is still above 93 degrees. If heat loss can be staved with dry clothing or shelter from the wind his body will re-warm itself, but extreme care must be taken. Even though outwardly he may just appear wet and miserable the life-systems of a hypothermia victim are in a precarious state. Blood circulation patterns have adjusted to cold stress and jostling disturbs these patterns and endangers the heart. Heat loss must be reduced in every way possible, a sleeping bag works well, but in a pinch use anything that insulates. Be sure to cover the head and neck, areas of high heat loss. Also, talk to the victim. His degree of awareness is a clue to the degree of severity of his hypothermia and don't forget others in the party. If one person is having a problem it's likely that they are not alone.

Dean: We gotta get off this river.

Michael: Maybe I could find a way back to the bridge?

Dean: Yeah, we gotta get David looked at.

Narrator: David's hypothermia was mild. He only needs to get shelter, nourishment, and he should get checked by a doctor.

David: Well, I think I'll survive.

Dean: You feeling better?

Narrator: But what if Dean hadn't been so quick to respond? What if David had spent longer in the river and his core temperature had dropped more than a few degrees? David's hypothermia would have then been severe. Any chance of survival would have required careful re-warming in a hospital setting, not in gathering darkness and growing desperation on the river bank.

Flashback to dragging David from the river.

David (narrator): Well, Michael found a trail and we all walked out just before dark. I lost my boat of course, but all-in-all I feel pretty lucky. I'm alive, and a lot smarter.

CLOSING SCENE: Group gathered around fire on riverside. Credits Begin.
